Ontario

Ministry of
Northern Development
and Mines

Mines and
Minerals
Division

GEOLOGICAL DATA INVENTORY FOLIO

GDIF 591

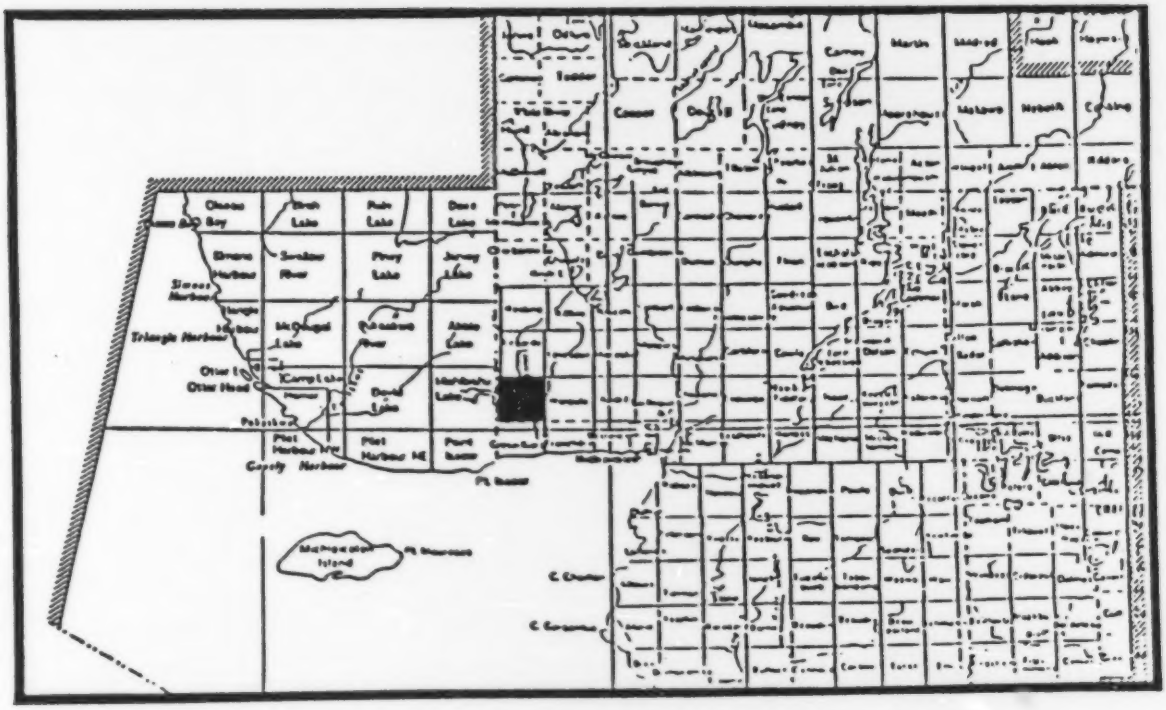
ST. GERMAIN TOWNSHIP

Sault Ste. Marie Mining Division

N.T.S. No. 42C/03S

Compiled by the staff of
the Resident Geologist's Office

WAWA



LOCATION MAP

Mining Claim Map Number G-2290 (formerly M-1574)

This project was funded by the Northern Development Fund, Wawa Economic Development Initiatives

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Wawa Resident Geologist's Office, 1991. St. Germain Township, Geological Data Inventory Folio 591; compiled by the staff of the Resident Geologist's Office, Wawa.

Original Compilation by: Howson, Tim, 1986.

Date	Page(s) Revised	Revised by
11/89	1, 3-1, 4-2, 4-3, 4-4, 5-1, 5-2, 6-1, 6-2, 7-1, 9-1, 10-1, 11-1, 11-2, 11-3, 11-4, 12-2, 13-1, 13-2, 13-3, 13-4, 14-1, 15-1	C.L.

Date	Page(s) Revised	Revised by

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TABLE OF CONTENTS

Data Sources Checklist 1

Mineral Commodities Reference List 2

Mineral Occurrences ..... 3 - 1,2. . .

Type of Work ..... 4 - 1,2. . .

Drillhole Summary ..... 5 - 1,2. . .

Airborne Geophysical Survey Data ..... 6 - 1,2. . .

Geochemical Survey Data ..... 7 - 1,2. . .

Geochronology Data ..... 8 - 1,2. . .

Air Photographs, Mosaics, Imagery ..... 9 - 1,2. . .

Topographic Maps ..... 10 - 1,2. . .

Newspaper Clippings File ..... 11 - 1,2. . .

OGS/ODM General Index Search ..... 12 - 1,2. . .

Selected References ..... 13 - 1,2. . .

Notes ..... 14 - 1,2. . .

Addenda ..... 15 - 1,2. . .

Addenda 1. Map showing air photos available for viewing

ACCOMPANYING MAPS (see map legends on outside back cover).

A. Files Index Map (s) ..... Map A-1

B. Exploration Data Map (s) ..... Map B-1

ABBREVIATIONS LIST

A.F.R.O.	Assessment Files Research Office (Toronto)
Ann. Rept. (A.R.)	Annual Report
A.R.I.P	Aggregate Resources Inventory Paper
Bull	Bulletin
C.I.M.M.	Canadian Institute of Mining and Metallurgy
C.J.E.S.	Canadian Journal of Earth Sciences
C.M.J.	Canadian Mining Journal
Econ. Geol.	Economic Geology
E.M.R.	Department of Energy, Mines and Resources
E.P.B.	Earth Physics Branch
G.A.C.	Geological Association of Canada
GC	Geological Circular
GDIF	Geological Data Inventory Folio
Geol.	Geology
Geol. Soc. Amer. Bull.	Geological Society of American Bulletin
GR	Geoscience (Geological) Report
GSC	Geological Survey of Canada
I.L.S.G.	Institute on Lake Superior Geology
IMR	Industrial Mineral Report
I.O.C.	Report of the Iron Ore Committee (1923)
Jour. (or J)	Journal
MDC	Mineral Deposit Circular
M.D.I. (R)	Mineral Deposit Inventory (Record)
Mem	Memoir
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MP	Miscellaneous Paper
MRC	Mineral Resources Circular
N.M.I.	National Mineral Inventory
NOEGTS	Northern Ontario Engineering Geology Terrain Study
NTS	National Topographic System
O.B.M.	Ontario Bureau of Mines
O.D.L.F.	Ontario Department of Lands and Forests
ODM	Ontario Department of Mines/Ontario Division of Mines
ODMNA	Ontario Department of Mines and Northern Affairs
OFR	Open File Report
OGS	Ontario Geological Survey
P.R.	Preliminary Report
Prelim. (or P)	Preliminary
R.C.	Royal Commission on Mineral Resources of Ontario (1890)
S.M.D.R.	Source Mineral Deposit Record
SOEGTS	Southern Ontario Engineering Geology Terrain Study
Sum. Rept.	Summary Report
OFM	Open File Map
OCRS	Ontario Centre for Remote Sensing
CCRS	Canada Centre for Remote Sensing
WRGO	Wawa Resident Geologist's Office

*

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no': if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	T.H.
2	Assessment Files Research Office, Toronto	Yes	A.F.R.O.
3	OGS/ODM General Index	Yes	T.H.
4	Catalogue of Airborne Geophysical Surveys (ODM)	Yes	T.H.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	No	T.H.
6	ODM Industrial Mineral Reports	No	T.H.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	T.H.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	No	T.H.
9	Newspaper Clippings File	Yes	C.L.
10	GSC Index to Publications	No	T.H.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	No	T.H.
12	OGS Index Maps	Yes	T.H.
13	Source Mineral Deposit Records (OGS)	No	T.H.
14	Author - Subject Articles File	Yes	T.H.
15	ODM/OGS Miscellaneous Papers	Yes	T.H.
16	ODM Geological Circulars	No	T.H.
17	OGS Study Series	No	T.H.
18	ODM Preliminary Reports	No	T.H.
19	ODM Bulletins	No	T.H.
20	ODM/OGS Open File Reports	Yes	T.H.
21	OGS Northern/Southern Ontario Engineering Geology Terrain Studies	Yes	T.H.
22	OGS Aggregate Resources Inventory Papers	No	T.H.
23	OGS Mineral Potential Maps	Yes	T.H.
24	Drill Core Library Catalogue	Yes	T.H.
25	Algoma Central Railway Maps	Yes	T.H.
*			

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MINERAL COMMODITIES REFERENCE LIST

anh ..... Anhydrite
ank ..... Ankerite
ap ..... Apatite
arg ..... Argentite
As ..... Arsenic
asp ..... Arsenopyrite
asb ..... Asbestos
ba ..... Barite
be ..... Beryl
Bi ..... Bismuth
bn ..... Bornite
Cd ..... Cadmium
calc ..... Calcite
carb ..... Carbonate
cc ..... Chalcocite
cp ..... Chalcopyrite
ch ..... Chert
clay ..... Clay
Co ..... Cobalt
cob ..... Cobaltite
▲Cu ..... Copper
cor ..... Corundum
dol ..... Dolomite
ep ..... Epidote
fel ..... Feldspar
fl ..... Fluorite (flurospar)
fu. ..... Fuchsite
gn ..... Galena
gt. ..... Garnet
goe ..... Goethite
▲Au ..... Gold
▲gl ..... Graphite

gl ..... Gravel
gyp ..... Gypsum
hem ..... Hematite
Fe ..... Iron
▲IF ..... Iron Formation
jas ..... Jasper
ky ..... Kyanite
Pb ..... Lead
lim ..... Limonite
Li ..... Lithium
mgst ..... Magnesite
▲mag ..... Magnetite
mc ..... Malachite
Mn ..... Manganese
mb ..... Marble
mar ..... Marcasite
ma ..... Marl
mi ..... Mica
mo ..... Molybdenite
Mo ..... Molybdenum
mon ..... Monazite
ne .... Nephelite (nepheline)
Ni ..... Nickel
Nb ..... Niobium
Pd ..... Palladium
pent ..... Pentlandite
Pt ..... Platinum
▲py ..... Pyrite
pyl ..... Pyrochlore
po ..... Pyrrhotite
q ..... Quartz
qcv .. Quartz carbonate vein

ra ..... Radioactive minerals
RE ..... Rare Earths
sd ..... Sand
sgl ..... Sand and gravel
ss ..... Sandstone
scap ..... Scapolite
shee ..... Scheelite
serp ..... Serpentine
sh ..... Shale
sid ..... Siderite
si ..... Silica
▲Ag ..... Silver
sl ..... Slate
sm ..... Smaltite
sod ..... Sodalite
spec ..... Specularite
sp ..... Sphalerite
spd ..... Spodumene
s ..... Sulphides
talc ..... Talc
Te ..... Tellurium
th ..... Thorite
Th ..... Thorium
ti ..... Titanite
Ti ..... Titanium
tour ..... Tourmaline
W ..... Tungsten
uran ..... Uraninite
U ..... Uranium
verm ..... Vermiculite
Zn ..... Zinc
zr ..... Zircon

ADDITIONS

▲qv.....quartz vein

✲

▲ Solid triangles indicate metal and mineral occurrences shown on the accompanying maps

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MINERAL OCCURRENCES			Source Min. Dep. Record	References in OGS Min. Dep. Cir. and Indus. Mineral Rpts.	Additional References and/or Remarks
Map Ref. Letter	(see Data Map) Name(s)	Mineralization			
A	Unnamed Occurrence	py			-see file St. Germain 0010 Conductor 23 South
B	Unnamed Occurrence	IF, py, mag			-see file St. Germain 0010 Conductor 22 East
C	Unnamed Occurrence	IF, py, mag			-see file St. Germain 0010 Conductor 21 South
D	Unnamed Occurrence	gf, py			-see file St. Germain 0010 Grid T23B
E	Unnamed Occurrence	gf, py			-see file St. Germain 0010 Grid T23C
F	Feather Creek Showing	qv, Au, Ag			-see file WP-Mishibishu-14
G	Katzenbach Lake Copper Occurrence	Cu			-see OGS MP 132, p. 289 -see OGS Prelim. Map P. 2970 -see file St. Germain 0012

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968																		
										Airborne			Ground						
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp		Mag	EM	Rad	Mag	EM	Rad	IP	Self Potential	Resistivity	Other Data or footnotes
1	Asarco Exploration Co. of Canada Ltd. (St. Germain 0010)	72				72					72?		72	72					N-1
2	Amoco Canada Petroleum Co. Ltd. (St. Germain 0011-B1)	80			80	80													N-2
2	Amoco Canada Petroleum Co. Ltd. (St. Germain 0011-A1)				80	80													N-2
3	Algoma Central Railway Vishnupada, B. (St. Germain 0011-C1)	62 63																	
3	Umex Corporation Ltd. (Andre 0013-A1)	74																	
4	Erie Canadian Mines Ltd. (St. Germain 0012)	37				38		37 38											

SEE PAGE 13-1,... NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968																			
										Airborne			Ground							
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp		Mag	EM	Rad	Mag	EM	Rad	IP	Self Potential	Resistivity	Other Data	or footnotes
5	MacMillan Energy Corp. Ltd. (42C/03SW 0027)	84	84			84		84 85						84						
6	MacMillan Energy Corp. Ltd. (42C/03SW 0028)	84	84			84		84		83	83									N-3
6	MacMillan Energy Corp. Ltd. (Groseilliers 0015)									83	83									
7	Falconbridge Nickel Mines Ltd. (Groseilliers 0011)									70	70									
8	MacMillan Energy Corp. Ltd. (42C/03NW 0017) (42C/03NW 0018)		85																	
9	Granges Exploration Ltd. (WP-St. Germain-1)				86	86														N-6

SEE PAGE 13-1,... NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968								Airborne			Ground						Other Data or footnotes
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp		Mag	EM	Rad	Mag	EM	Rad	IP	Self Potential	Resistivity	
10	Muscocho Explorations Ltd. (WP-Mishibishu-11)									87	87							87	N-4 N-6
11	Alotta Resources Ltd. (WP-Groseilliers-1)									87	87								N-6
12	Muscocho Explorations Ltd. (WP-Groseilliers-3)									88	88							88	N-5 N-6
13	Flanagan McAdam & Company (WP-Mishibishu-14)	87				87													N-6
14	Universal Trident Industries Ltd. (WP-St. Germain-2)		88			88													N-6
15	Daiwan Engineering Ltd. (WP-Mishibishu-22)									89	89								N-6

SEE PAGE 13-1,...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

TYPE OF WORK (see Files Index Map) Exploration Files		Numbers below represent the year of the work ; e.g. 68 for 1968																		
Map Ref. No.	Company/ Author (file number)	Geological	Geochemical	Trenching or Stripping	Drilling	Assay Data	Underground Work	Prospectus Notes Corresp	Airborne			Ground						Other Data	or footnotes
									Mag	EM	Rad	Mag	EM	Rad	IP	Self potential	Resistivity		
16	Muscosho Exploration Ltd. (WP-Groseilliers-4)	88	88			88													N-6
17	Alotta Resources Ltd. (WP-Franchere-3)											88	88						N-6
18	Alotta Resources Ltd. (WP-Franchere-6)	88	88			88													N-6

SEE PAGE 13-1,... NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

DRILLHOLE SUMMARY									
Map Drill Loc. No.	Company Name	Company Drillhole Number	Date Drill-ed	Bearing and Azimuth	Init. Dip of Hole	Over-burden Thick-ness	Hole Length	Log Mineraliza-tion	Assay data in log
1	Amoco Canada Petroleum Co. Ltd. (St. Germain 0011-A1)	PO-80-12S-1	1980	175	-45	1.5m	119.5m	py	Au, Ag, Cu, Zn
2	Granges Exploration Ltd. (WP-St. Germain-1)	M-72	1986	East	-50	24.38m	63.09m	ep, calc	Au, Ag
3	Granges Exploration Ltd. (WP-St. Germain-1)	M-73	1986	East	-50	7.32m	50.90m	calc, q, talc	Au, Ag
4	Granges Exploration Ltd. (WP-St. Germain-1)	M-75	1986	East	-60	20.12m	66.14m	talc	Au, Ag
5	Granges Exploration Ltd. (WP-St. Germain-1)	M-76	1986	East	-60	1.83m	124.05m	calc, q, py, carb, ep, gt fel	Au, Ag
6	Granges Exploration Ltd. (WP-St. Germain-1)	M-78	1986	East	-65	6.71m	78.33m	fel, calc, q, py	Au, Ag
7	Granges Exploration Ltd. (WP-St. Germain-1)	M-79	1986	East	-50	3.66m	46.01m	fu, calc, py, qcv, gf, ank, q, carb	Au, Ag
8	Granges Exploration Ltd. (WP-St. Germain-1)	M-100	1986	East	-50	9.14m	76.20m	q, py, mo, fel carb, hem, gf	Au, Ag

DRILLHOLE SUMMARY									
Map Drill Loc. No.	Company Name	Company Drillhole Number	Date Drill-ed	Bearing and Azimuth	Init. Dip of Hole	Over-burden Thick-ness	Hole Length	Log Mineraliza-tion	Assay data in log
9	Granges Exploration Ltd. (WP-St. Germain-1)	M-101	1986	East	-45	3.05m	84.43m	py, calc, po, gf, fel	Au, Ag
10	Granges Exploration Ltd. (WP-St. Germain-1)	M-102	1986	165	-50	3.05m	202.39m	ank, calc, q, ep, py, carb, tour	Au, Ag

Map Index No.	AIRBORNE GEOPHYSICAL SURVEY DATA		Flight Altitude	Flight Line Direct.	Flight Line Spacing
	-by -for -year	Type of Survey			
6	-by Aerodat Ltd. -for MacMillan Energy Corp. Ltd. -1983	-a. Aerodat/Geonics 3 frequency electromagnetic system -b. Herz Totem 2A VLF-EM system -c. Geometrics G-803 proton precession type magnetometer	60m	NE-SW	660′
7	-by McPhar Geophysics -for Falconbridge Nickel Mines Ltd. -1970	-a. McPhar KEM electromagnetic system -b. Proton free precession magnetometer	300′	N-S	1/12mile 1/6mile
10	-by Dighem Surveys and Processing Inc. -for Muscocho Explorations Ltd. -1987	-a. Scintrex cesium magnetometer -b. Sonotek PMH 5010 proton magnetometer -c. Herz Totem 2A VLF-EM system	45m 30m	032-212	100m
11	-by H. Ferderber Geophysics Ltd. -for Alotta Resources Ltd. -1987	-a. GEM-GSM-9 BA (Overhauser) proton precession magnetometer -b. Herz Totem 2A VLF-EM system	250′	065-245	440′

Map Index No.	AIRBORNE GEOPHYSICAL SURVEY DATA		Flight Altitude	Flight Line Direct.	Flight Line Spacing
	-by -for -year	Type of Survey			
12	-by Dighem Surveys and Processing Inc. -for Muscocho Explorations Ltd. -1988	-a. Dighem 3 electromagnetic system -b. Sonotek PMH 5010 proton magnetometer -c. Herz Totem 2A VLF-EM system	60m	65-245 135-315	100m
15	-by Terraquest Ltd. -for Daiwan Engineering Ltd. -1989	-a. PMAG 3000 magnetometer -b. Herz Totem 2A VLF-EM system	100m	360	100m

Map Site No.	GEOCHEMICAL SURVEY DATA		By	Reference(s)
	Type of survey	Analysis for		
1	Humus & Soil Sampling	Au	MacMillan Energy Corp. Ltd.	file 42C/03SW 0027
2	Humus & Soil Sampling	Au	MacMillan Energy Corp. Ltd.	file 42C/03SW 0028
3	Lake Sediment and Water Geochemical	Zn, Cu, Pb, Ni, Co, Ag, Mn, As, Mo, Fe, U, F	OGS-GSC	OGS OFR 5267
4	Stream and Spring Sediment	Cu, Ni, Zn, Co, Mn, and cold extractable heavy metals	Wolfe, W.J. for the OGS	ODM GR 158 and 6 Maps
5	Soil Sampling	Au	MacMillan Energy Corp. Ltd.	file 42C/03NW 0017 file 42C/03NW 0018
6	Soil Sampling	Au, Ag, As, Pb, Zn, Cu	Universal Trident Industries Ltd.	file WP-St. Germain-2
7	Rock and Stream Sediment Sampling	Au	Muscocho Exploration Ltd.	file WP-Groseilliers-4
8	Soil and Humus Sampling	Au, As	Alotta Resources Ltd.	file WP-Franchere-6

GEOCHRONOLOGY DATA – AGE DATING

Site No. on Map	Method	Material	Reference	Result

AERIAL PHOTOS; MOSAICS; IMAGERY

The following items are available for inspection at the Resident Geologist Office

(a) Aerial Photographs

1. 1" to 1/4 mile, black & white; 1980; see Addenda (p. 15-1) for details

(b) Photomosaics

(c) Satellite Imagery

1. Canada Centre for Remote Sensing Side Aperture Radar - HS880175 (C)93, May 1988 1:50 000 (Black & White)

2. Canada Centre for Remote Sensing Side Aperture Radar - HS880173 (C)85, May 1988 1:50 000 (Black & White)

3. Experimental Composite of Airborne Radar (SAR) and Total Field Airmagnetics, SAR Data Acquired 24-May-88 by CCRS Radar Development Program. Total Magnetic Field Derived from Digital Archives of OGS Map 81 143 R. B. Barlow. Processed at Ontario Centre for Remote Sensing/MNR 10-Feb-89 1:50 000

4. Experimental Composite of Airborne Radar (SAR) and Total Field Aeromagnetics SAR Data Acquired 24-May-88 by CCRS Radar Development Program. Total Magnetic Field Derived from Digital Archives of OGS Map 81 143 R. B. Barlow. Processed at Ontario Centre for Remote Sensing/MNR 10-Feb-89 1:100 000

TOPOGRAPHIC MAPS (selected)			
Scale	Year	Name and/or Number	By
1: 50 000	1970	Mishibishu Lake: NTS 42C/3	Surveys and Mapping Branch: Department of Energy, Mines and Resources
1: 100 000	1979	Pukaskwa River: NTS 42C/SW and part of 42D/SE	Surveys and Mapping Branch: Ministry of Natural Resources

NEWSPAPER CLIPPINGS FILE			
PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
Northern Miner	07/22/76		UMEX will drill ground at Wawa
George Cross Newsletter	10/15/82		Work starting soon on big gold prospect 50 miles SSE of Hemlo MacMillan Energy Corp. Ltd.
George Cross Newsletter	03/27/84		Mishi Lake exploration to be continued MacMillan Energy Corp. Ltd.
Northern Miner?	03/29/84		MacMillan proceeds with Mishi Lake work
George Cross Newsletter	10/30/84		Mishibishu Lake property deal reported
Northern Miner?	11/01/84		MacMillan options Mishibishu claims
Northern Miner?	11/08/84		MacMillan deal
Northern Miner	08/15/85	1&6	Mishibishu results might spark activity
Northern Miner	09/16/85		Granges/MacMillan deal on Mishibishu property
Northern Miner?	07/07/86		Granges MacMillan $550 000 program now under way
Northern Miner	11/17/86		MacMillan gold zone expands at Mishibishu Lake MacMillan Energy Corp. Ltd., Granges Exploration Ltd.

NEWSPAPER CLIPPINGS FILE

PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
George Cross Newsletter	05/22/87		MacMillan Energy Corp. Ltd.
George Cross Newsletter	10/30/87		Underground operations planned at Ontario gold project MacMillan Energy Corp. Ltd.
Northern Miner	12/21/87	13	Magnacon reveals surprizes for Flanagan
Northern Miner	01/25/88	32	Granges Exploration Ltd./MacMillan Energy Corp. the new Mishi Lake discovery $4.5 Million Program for first half of 1988 expected to increase tonnage, grade
Northern Miner	02/01/88		The Applegath Group of Companies-Mishibishu Lake area Property map of the area
Northern Miner	03/14/88	23	Muscocho buys Westfield's Mishibishu Lake interest
Northern Miner	05/09/88	24	The Applegath Group of Companies-Mishibishu Lake area Property map of the Mishibishu area
News Release	05/09/88		Alotta resources holds three groups of claims in the Mishibishu Area in Northwestern Ontario and is currently starting the 1988 field programs
Northern Miner	05/16/88		The Applegath Group of Companies-Mishibishu Lake area Property map of the Mishibishu area

NEWSPAPER CLIPPINGS FILE			
PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
George Cross Newsletter	06/30/88		Alotta Resources Ltd.
George Cross Newsletter	07/15/88		Mishibishu Lake area map - latest holdings in the area
George Cross Newsletter	09/06/88		Mishi project and Tartan law suit reviewed Granges Exploration
Globe & Mail	09/29/88	B1-B2	Granges says Hemlo violated share purchase agreement
George Cross Newsletter	09/29/88		Hemlo/Noranda violated confidentiality agreement
News Release	10/06/88		Alotta Resources Ltd.
Northern Miner	10/17/88		Alotta Drilling
Northern Miner	06/18/89	A4	The TSE welcomes MacMillan Gold Corp. Ltd.
Northern Miner	06/19/89	A1,A2	Granges seeks to overturn share purchase by Hemlo
Northern Miner	06/19/89		M.I.M. completed purchase of 11 million Granges shares
George Cross Newsletter	? / /		Granges joins MacMillan in Mishibishu Lake program

NEWSPAPER CLIPPINGS FILE

PAPER	ISSUE DATE(S)	PAGE	ARTICLE HEADLINE OR COMPANY AND/OR SUBJECT
World investment News	10/ /87		Mishi Project advances MacMillan Energy Corp. Ltd./Granges Exploration Ltd.
George Cross Newsletter?	? / /		Drilling resumes at Mishi Lake MacMillan Energy Corp. Ltd.

OGS/ODM GENERAL INDEX SEARCH

Words Searched:
Amoco Canada Petroleum Co. Ltd.
Asarco Exploration of Canada Ltd.
Bowman Lake
Dog River
Dud Creek
Erie Canadian Mines Ltd.
Falconbridge Nickel Mines Ltd.
Feather River
Jimmy Kash River
Jostle Lake
Mishi Creek
St. Germain Township
Stores Creek
Township 33 Range 24
Umex Corp Ltd.
Univeristy River

Index Volume	Listing	Report Volume	Part	Page
1	Dog River, Lake Superior			
	Fall of, from headwaters to L. Superior	14	1	286
	Fish, trout	8		133
	whitefish	14	1	297
	Gold	8		141
	Iron ore, notes	8		256,258
		9		160,161
		14	1	322,323
	Notes by J.M. Bell	14	1	285
	Coleman	8		133
	Wilmott	8		140,141
	Rocks on and near:			
	agglomerates	14	1	342
	chert, pyritous	14	1	314
	conglomerate	8		146,166
		9		161
		10		203
		11		162,167
		14	1	346
	greenstone	14	1	302
	Huronian	8		133
	phyllites	14	1	343,345
	notes	14	1	307
	striae on and near	14	1	288
	direction	9		178,179
	Waterpower, Bull (3) 13	14	1	299
	photo	8		168,169
2	No Listings			
3	Feather River, University River			
	Canoe Route on; drainage	49	9	2,3

OGS/ODM GENERAL INDEX SEARCH

Words Searched:

Index Volume	Listing	Report Volume	Part	Page
3	University River, Lake Superior Drainage, navigation	49	9	3,4
4	No Listings			
5	No Listings			
6	No Listings			
7	No Listings			
8	No Listings			
9	St. Germain Tp., Algoma District Geology of the Pukaskwa-University Rivers area	GR 153		
	University-Pukaskwa Rivers Area, Algoma-Thunder Bay Districts Geology of the area Report, maps 2332 & 2333 & chart on, 1977 by G. Bennett & P.C. Thurston	GR 153		
	University River Pukaskwa River Area, Algoma District	GR 158		7,16, 43,44

SELECTED REFERENCES			Reference	Map Scale and/or Reprt/Pages
Author	Date	Title		
Algoma Central Railway	1964	Mishibishu Lake - Pokei Lake	ACR Map 42C 3 & 6	1" =1mile
Barlow, R. B.	1988	Total Magnetic Feild Colour Image Developed from Digital Archives of the OGS, Wawa Area, Districts of Algoma, Thunder Bay & Sudbury	OGS Geophysical/ Geochemical Series Map 81143	1: 100 000
Barlow, R. B.	1988	Calculated Second Vertical Derivative Colour Image Developed from Digital Archives of the OGS, Wawa Area, Districts of Algoma, Thunder Bay & Sudbury	OGS Geophysical/ Geochemical Series Map 81144	1: 100 000
Barlow, R. B.	1988	Directly Shadowed Total Magnetic Field Colour Image, Developed from Digital Archives of the OGS, Wawa Area, Districts of Algoma, Thunder Bay & Sudbury	OGS Geophysical/ Geochemical Series Map 81145	1: 100 000
Bell, J. M.	1905	Iron Ranges of Michipicoten (West)	OBM AR vol. 14, Pt. 1, with Map 14a	p. 278-355 1: 126 720
Bennett, G., Thurston, P. C. Giguere, J. F.	1969	Operation Pukaskwa	ODM Prelim. Map P. 541	1" =2miles

ST. GERMAIN

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Bennett, G. Thurston, P. C.	1977	Geology of the Pukaskwa - University Rivers Area, Districts of Algoma and Thunder Bay	ODM GR 153 and 2 Maps	60 pages 1"=1mile
Bennett, G. Thurston, P. C.	1972	Operation Pukaskwa, Districts of Algoma and Thunder Bay, Ontario	OGS OFR 5073	93 pages
Bennett, G. Thurston, P. C. Giguere, J. F.	1972	University River Sheet	ODM Map 2333	1"=1mile
Bennett, G. Thurston, P. C. Giguere, J. F.	1969	Operation Pukaskwa, Pukaskwa River Sheet, Districts of Thunder Bay and Algoma	ODM Prelim. Map P. 507	1"=1mile
Bennett, G. Thurston, P. C. Giguere, J. F.	1968	Summary of Field Work by the OGS, No. 12, Operation Pukaskwa, Districts of Thunder Bay and Algoma	OGS MP 022	p. 31-34
Bowen, R. P.	1986	Precambrian Geology of the Mishibishu Lake Area	OGS OFM 38	1"=1/2mile
Bowen, R. P. Logothetis, J.	1985	Mishibishu Area, Districts of Thunder Bay and Algoma	OGS MP 126	p. 78-82

SELECTED REFERENCES			Reference	Map Scale and/or Reprt/Pages
Author	Date	Title		
Bowen, R. P. Logothetis, J. Heather, K. B.	1986	Mishibishu Lake Area, Northeastern Section	OGS Prelim. Map P. 2970	1"=1/4mile
Coleman, A. P.	1899	Map of the Western Part of the Michipicoten Mining Division, Algoma District	OBM Map 8b	1: 253 440
Fortescue, J. A. C. Thomson, I. Dickman, M. Terasmae, J.	1981	Multidisciplinary Followup of Regional PH Patterns in Lakes North of Lake Superior	OGS OFR 5342, Pt. 1	134 pages
Fortescue, J. A. C. Thomson, I. Dickman, M. Terasmae, J.	1981	Multidisciplinary Followup of Regional PH Patterns in Lakes North of Lake Superior	OGS OFR 5342, Pt. 2	366 pages
Gartner, J. F. McQuay, D. F.	1979	Pukaskwa River Including Michipicoten Island: Northern Ontario Geology Terrain Study	NOEGTS Study 72 with Map 5096	14 pages 1: 100 000
Heather, K. B.	1985	Gold Showings of the Mishibishu Lake Area, Thunder Bay Districts	OGS MP 126	p. 83-89
Milne, V. G. et al	1972	Manitouwadge - Wawa Sheet	ODM Map 2220	1"=4miles

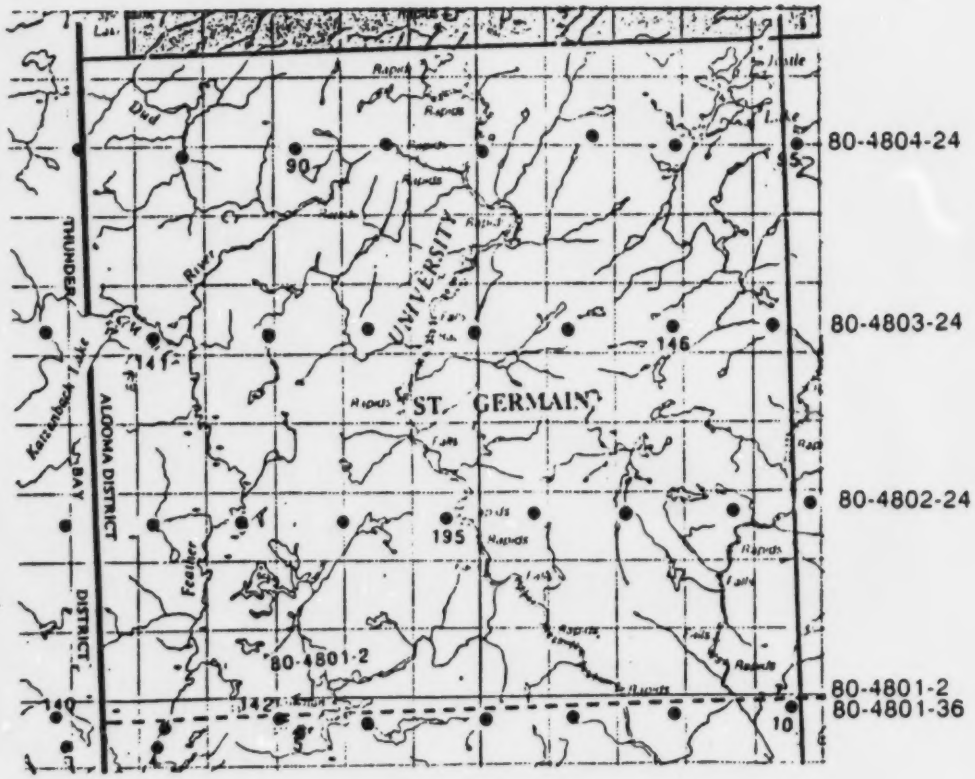
SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
ODM-GSC	1963	Aeromagnetic Map: Mishibishu Lake	ODM-GSC Aeromagnetic Series Map 2176G	1" =1mile
OGS-GSC	1979	Regional Lake Sediment and Water Geochemical Reconnaissance	OGS OFR 5267 and 16 Maps	83 pages 1: 250 000
OGS	1987	Airborne Electromagnetic and Total Intensity Magnetic Survey, Wawa Area, Districts of Algoma, Sudbury & Thunder Bay	OGS Geophysical/ Geochemical Series Map 810	1: 20 000 (2 maps)
Reid, R. G. Reilly, B. A.	1987	Mishibishu Lake Area, Districts of Algoma and Thunder Bay	OGS MP 137	p. 138-145
Springer, Janet	1977	Ontario Mineral Potential: White River Sheet	OGS Prelim. Map P. 1519	1: 250 000
Thomson, Ian	1980	No. 21, Acid Lakes North of Lake Superior: Integrated Studies in the Wawa Area, District of Algoma To Examine the Effects of Acid Precipitation	OGS MP 96	p. 140-144
Wolfe, W. J.	1976	Regional Geochemical Reconnaissance of Archean Metavolcanic - Metasedimentary Belts in the Pukaskwa Region	ODM GR 158	54 pages

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scale and/or Reprt/Pages
Wolfe, W. J.	1973	Regional Geochemical Reconnaissance of Archean Metavolcanic - Metasedimentary Belts in the Pukaskwa Region, Algoma and Thunder Bay Districts	OGS OFR 5091	62 pages
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Cold Extractable Heavy Metals in Stream and Spring Sediments	ODM Prelim. Map P. 508	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Copper in Stream and Spring Sediments	ODM Prelim. Map P. 509	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Zinc in Stream and Spring Sediments	ODM Prelim. Map P. 510	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Manganese in Stream and Spring Sediments	ODM Prelim. Map P. 511	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Nickel in Stream and Spring Sediments	ODM Prelim. Map P. 512	1"=1mile
Wolfe, W. J. Wright, G. R.	1969	Operation Pukaskwa, Districts of Thunder Bay and Algoma: Geochemistry of Cobalt in Stream and Spring Sediments	ODM Prelim. Map P. 513	1"=1mile

Note #	NOTES
0	St. Germain Township was formerly known as Township 33 Range 24.
1	This file (St. Germain 0010) suggests that an airborne electromagnetic survey was flown over the work area. The anomalies have been plotted on the exploration data map (B-1) which accompanies this report, no further information is available. This file also contains a sampling program completed in 1972.
2	File St. Germain 0011-A1 is a duplicate of material contained in St. Germain 0011-B1.
3	This file (42C/03SW 0028) also contains information regarding a sampling program completed in 1984.
4	The resistivity survey outlined in this file (WP-Mishibishu-11) is an airborne survey.
5	The resistivity survey outlined in this file (WP-Groseilliers-3) is an airborne survey.
6	The following is a list of Wawa file numbers with their corresponding Toronto (Assessment Files Research Office) file numbers: WP-St. Germain-1 - DD.11 WP-Mishibishu-11 - 2.10649 WP-Groseilliers-1 - 2.10737 WP-Groseilliers-3 - 2.12123 WP-Mishibishu-14 - 2.11040 WP-St. Germain-2 - 2.12245 WP-Mishibishu-22 - 2.12437 WP-Groseilliers-4 - 2.12122 WP-Franchere-3 - 2.11941 WP-Franchere-6 - 2.12424

ADDENDA

Map showing air photos available for viewing at Wawa Resident Geologist's Office, see p.9-1



CONVERSION FACTORS

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	6.451 6	cm^2
1 m^2	10.763 9	square feet	1 square foot	0.092 903 04	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 02	cubic inches	1 cubic inch	16.387 064	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
		MASS			
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 908 8	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in cooperation with the Coal Association of Canada.

For further information please contact:

Wawa Resident Geologist's Office
Ministry of Northern Development and Mines
Helen Mine Road
P.O. Box 530
Wawa, Ontario
P0S 1K0
705-856-4883

ST. GERMAIN

MAP LEGENDS

A. FILES INDEX MAP

FILE AREAS **See pages 4-1,2 .... of text**

- Reference number is always inside work area outlined. See listing in text pages.
- Small area of exploration data
- File covers whole township or area

B. EXPLORATION DATA MAP

MINERAL OCCURRENCES: See pages 3-1,2... of text

- Mineral occurrence at surface, with reference letter
- Mineral occurrence with shaft, depth given with reference letter
- Mineral occurrence reported but exact location uncertain, with reference letter
- Mineralized float with reference letter
- Mineral occurrence encountered in drilling, with reference letter

DRILLHOLES: See pages 5-1,2... of text

- Location of single drillhole, with reference number
- Location of group of closely spaced drillholes, with reference number
- Drillhole, exact location uncertain, with reference number
- Property with underground drillholes in this general area, with reference number
- Property with drillholes which have not been plotted on map, with reference number
- Reverse circulation drillhole; churn drilling, with reference number

GEOCHEMICAL: See pages 7-1,2....of text

- Geochemical sample site, with reference number
- Area of geochemical sampling, with reference number

GEOPHYSICAL ANOMALIES

Airborne Surveys: See pages 6-1,2... of text

- AM — Airborne magnetic anomaly
- Airborne electromagnetic anomaly. Length of anomaly along flight line
- Airborne electromagnetic anomaly. Location of anomaly along flight line
- Airborne electromagnetic anomaly. Conductor axis: definite, probable, possible
- AEM — Airborne electromagnetic anomaly. Conductor axis. Location of flight lines uncertain
- ARA — Airborne radiometric anomaly

Ground Surveys

- M — Ground magnetic anomaly
- VL — Ground electromagnetic anomaly (VL: Vertical loop, HL: Horizontal loop, VLF: Very low freq., Turam, JEM, Crone Em 16)
- RA — Ground radiometric anomaly
- IP — Induced polarization anomaly
- SP — Self potential anomaly
- AFMAG — Audio-frequency magnetic anomaly (total intensity)
- R — Resistivity anomaly
- GR — Gravity anomaly

GEOCHRONOLOGICAL DATA: See page 8 of text

- Age dating material sampling site, with reference number

MISCELLANEOUS DATA

- Trenching, pit
- Rock quarry
- Adit
- Open pit
- Sand and or gravel pit

MAPS
NOT
FILMED

CARTES
OMISES